

In addition to the EEP, developers will also be competing for land within the buffer strip as urbanization spreads through the Neuse River and Tar-Pamlico basins. According to the National Resource Inventory, from 1992 to 2003 the number of acres of cropland in North Carolina decreased from 5.96 million acres to 5.50 million acres (USDA, 2000 and 2007). This decrease of 446,000 acres over 11 years represents a 0.71% annual decrease in cropland due to cropland being converted into a variety of other uses, including urban development.

If we assume that this rate of loss reflecting urban development remains constant into the future and this rate of conversion applies for all land we have identified as viable for riparian buffers (not just cropland), we can estimate that 1,385 and 1,573 acres of current buffer land in the Neuse and Tar-Pamlico river basins will be converted to other land uses by the year 2020.⁸

When estimates of competing demand for buffer land are taken into account, we are left with approximately 14.7 thousand acres available for NOFPF buffer projects in the Neuse River Basin and 16.9 thousand acres in the Tar-Pamlico. Based on the nutrient loading projections presented in section 4.2.1, RTI predicts that 2.1 million pounds of nitrogen in the Neuse River Basin and 353 thousand pounds of nitrogen in the Tar-Pamlico will need to be offset through the year 2020. If all of this nutrient loading was offset with riparian buffer projects, RTI predicts (using EEP's estimate that one acre of buffer offsets 2,273 pounds of nitrogen on average) that this would require 925 acres of buffer in the Neuse and 155 acres of buffer in the Tar-Pamlico River Basins to be restored. This amounts to utilizing 7% of the total amount of buffer land in the Neuse River Basin and 1% of buffer land in the Tar-Pamlico River Basin that is potentially available for riparian buffer projects. These results are summarized in Table 4-5.

4.2.3 Land Costs

The land used by the EEP for constructing BMPs is frequently be obtained through conservation easements or purchased from current owners when public land is not available. To estimate the price per acre of land in the Neuse and Tar-Pamlico river basins, RTI obtained recent tax parcel GIS data from eight counties that made these data freely available through the Internet: Beaufort, Carteret, Craven, Dare, Edgecombe, Halifax, Johnston, and Wake counties. Tax assessment data were used for land costs because no actual sales data were available. In discussions with the Carolina Builders Association, they indicated that they were beginning to

⁸ It should be noted that there are other competing interests that RTI was not able to quantify in their analysis, for example, buffer projects being pursued for the Department of Transportation. Another relevant point to keep in mind is that this some landowners may be unwilling to allow a buffer to be installed on their property. Therefore, the following analysis should be interpreted as an approximation of the amount of land available for riparian buffer projects.